Amendment To The Claims

1.   (Previously Presented) A data scaling method comprising the steps of:

(a) receiving data;

(b) forming two partitions of the received data;

(c) applying admissible geometrization to the doubly partitioned received data to produce admissibly transformed data; and

(d) interpreting the admissibly transformed data as scaled data.

2.   (Previously Presented) The data scaling method of claim 1 wherein the received data comprises one or more scale types.

3.   (Previously Presented) The data scaling method of claim 1 wherein step (b) further comprises the steps of:

(b1) creating one or more data structures from the partitioned received data; and

(b2) associating a scale type to each subset of a partition of the received data.

4.   (Previously Presented) The data scaling method of claim 3 wherein in step (b2) the scale types associated to each subset of the partition correspond to scale types from the received data.

5.   (Previously Presented) The data scaling method of claim 3 wherein in step (b1) one or more of the data structures contain one or more elements selected from the group consisting of missing values and augmenting values.

6.   (Previously Presented) The data scaling method of claim 3 wherein in step (b1) the one or more data structures comprise one or more complete graphs.

7.   (Previously Presented) The data scaling method of claim 6 further comprising mapping the received data to edge weights of the one or more complete graphs

8.   (Previously Presented) The data scaling method of claim 3 wherein in step (b1) the one or more data structures comprise one or more symmetric matrices.

9.   (Previously Presented) The data scaling method of claim 8 further comprising direct substitution of the received data into the one or more symmetric matrices.

10.   (Previously Presented) The data scaling method of claim 8 wherein the symmetric matrices are selected from the group consisting of ideal node matrices and hybrid matrices.

11.   (Previously Presented) The data scaling method of claim 8 wherein the symmetric matrices are hollow symmetric matrices.

12.   (Previously Presented) The data scaling method of claim 1 wherein step (c) comprises applying 2-partition individual differences multidimensional scaling to the doubly partitioned received data.

13.   (Previously Presented) The data scaling method of claim 12 further comprising the steps of:
creating proximity weights; and
applying 2-partition individual differences multidimensional scaling using the proximity weights.

14.   (Previously Presented) The data scaling method of claim 12 further comprising the steps of:
applying 2-partition individual differences multidimensional scaling over a plurality of dimensions;
producing admissibly transformed data for each of the plurality of dimensions;
merging the admissibly transformed data from the plurality of dimensions; and
interpreting the merged admissibly transformed data as scaled data.

15.	(Previously Presented) The data scaling method of claim 12 wherein the admissibly transformed data are pseudo-distances or disparities.

16.	(Currently Amended) The data scaling method~~method for admissibly classifying data~~ of claim 1 wherein step (c) further comprises the step of:
forming commensurate admissibly transformed data.

17.	(Previously Presented) The data scaling method of claim 1 further comprising combining the received data and the admissibly transformed data values to produce a scale conversion model.

18.	(Currently Amended) The data scaling method of claim 1 wherein the received data are selected from the group consisting of~~comprises~~ classified data for a predetermined characteristic among a plurality of input domains and measured data for a predetermined characteristic among a plurality of input domains and survey data for a predetermined characteristic among a plurality of input domains and scoring data for a predetermined characteristic among a plurality of input domains and rating data for a predetermined characteristic among a plurality of input domains and ranking data for a predetermined characteristic among a plurality of input domains and preference data for a predetermined characteristic among a plurality of input domains.

19.	(Previously Presented) A data scaling method comprising the steps of:
(a) receiving data;
(b) partitioning the received data;
(c) forming one or more symmetric matrices from the partitioned received data;
(d) forming a second partition of the received data;
(e) associating a scale type to each subset of the second partition of the received data;
(f) applying admissible geometrization to the doubly partitioned received data to produce admissibly transformed data; and
(g) interpreting the admissibly transformed data as scaled data.

20. (Previously Presented) The data scaling method of claim 19 wherein the received data comprises one or more scale types said scale types forming the scale types of the subsets of the second partition of the received data.

21. (Previously Presented) The data scaling method of claim 19 wherein step (c) further comprises forming the one or more symmetric matrices using direct substitution of the received data into the symmetric matrices.

22. (Previously Presented) The data scaling method of claim 19 wherein the one or more symmetric matrices of step (c) further comprise one or more hollow symmetric matrices.

23. (Previously Presented) The data scaling method of claim 19 wherein step (f) comprises applying 2-partition individual difference multidimensional scaling to the doubly partitioned received data.

24. (Previously Presented) The data scaling method of claim 19 further comprising resampling over a plurality of rearrangements of the received data.

25. (Previously Presented) A data scaling method comprising the steps of:
(a) receiving data;
(b) creating a plurality of rearrangements of the received data;
(c) applying admissible geometrization to each of the plurality of rearrangements of the received data to produce a plurality of sets of admissibly transformed data;
(d) merging the plurality of sets of admissibly transformed data; and
(e) interpreting the merged data as scaled data.

26. (Currently Amended) Computer executable software program code stored on a computer readable medium, the code for scaling input data, the code comprising:
first code that receives data and forms one or more data structures using the received data; and

second code that applies an admissible geometrization process to the one or more data structures and produces admissible transformations of the input data to provide user output information as scaled data.

27. (Currently Amended) A method for ~~admissibly~~ merging data comprising the steps of:

(a) receiving data;

(b) forming two partitions of the received data;

(c) applying admissible geometrization to the doubly partitioned received data to produce admissibly transformed data; and

(d) interpreting the admissibly transformed data as scaled data in processing the admissibly transformed data to provide merged data.

28. (Currently Amended) The method for ~~admissibly~~ merging data of claim 27 wherein the received data comprises one or more scale types.

29. (Currently Amended) The method for ~~admissibly~~ merging data of claim 27 wherein step (b) further comprises the steps of:

(b1) creating one or more data structures from the partitioned received data; and

(b2) associating a scale type to each subset of a partition of the received data.

30. (Currently Amended) The method for ~~admissibly~~ merging data of claim 29 wherein in step (b2) the scale types associated to each subset of the partition of the received data correspond to scale types from the received data.

31. (Currently Amended) The method for ~~admissibly~~ merging data of claim 29 wherein in step (b1) one or more of the data structures contain one or more elements selected from the group consisting of missing values and augmenting values.

32. (Currently Amended) The method for ~~admissibly~~ merging data of claim 29 wherein in step (b1) the one or more data structures comprise one or more complete graphs.

33. (Currently Amended) The method for ~~admissibly~~ merging data of claim 32 further comprising mapping the received data to edge weights of the one or more complete graphs

34. (Currently Amended) The method for ~~admissibly~~ merging data of claim 29 wherein in step (b1) the one or more data structures comprise one or more symmetric matrices.

35. (Currently Amended) The method for ~~admissibly~~ merging data of claim 34 further comprising direct substitution of the received data into the one or more symmetric matrices.

36. (Currently Amended) The method for ~~admissibly~~ merging data of claim 34 wherein the symmetric matrices are selected from the group consisting of ideal node matrices and hybrid matrices.

37. (Currently Amended) The method for ~~admissibly~~ merging data of claim 34 wherein the symmetric matrices are hollow symmetric matrices.

38. (Currently Amended) The method for ~~admissibly~~ merging data of claim 27 wherein step (c) comprises applying 2-partition individual differences multidimensional scaling to the doubly partitioned received data.

39. (Currently Amended) The method for ~~admissibly~~ merging data of claim 38 further comprising the steps of:
creating proximity weights; and
applying 2-partition individual differences multidimensional scaling using the proximity weights.

40.   (Currently Amended) The method for ~~admissibly~~ merging data of claim 38 further comprising the steps of:

applying 2-partition individual differences multidimensional scaling over a plurality of dimensions;

producing admissibly transformed data for each of the plurality of dimensions;

merging the admissibly transformed data from the plurality of dimensions; and

processing the merged admissibly transformed data to provide merged data.

41.   (Currently Amended) The method for ~~admissibly~~ merging data of claim 38 wherein the admissibly transformed data values are pseudo-distances or disparities.

42.   (Currently Amended) The method for ~~admissibly classifying~~ merging data of claim 27 wherein step (c) further comprises the step of:

forming commensurate admissibly transformed data.

43.   (Currently Amended) The method for ~~admissibly~~ merging data of claim 27 wherein the received data are selected from the group consisting of classified data for a predetermined characteristic among a plurality of input domains and measured data for a predetermined characteristic among a plurality of input domains and survey data for a predetermined characteristic among a plurality of input domains and scoring data for a predetermined characteristic among a plurality of input domains and rating data for a predetermined characteristic among a plurality of input domains and ranking data for a predetermined characteristic among a plurality of input domains and ~~is comprised of~~ preference data for a predetermined characteristic among a plurality of input domains.

44.   (Currently Amended) A data merging method comprising the steps of:

(a) receiving data;

(b) creating a plurality of rearrangements of the received data;

(c) applying admissible geometrization to each of the plurality of rearrangements of the received data to produce a plurality of sets of admissibly transformed data;

(d) merging the plurality of sets of admissibly transformed data; and

(e) <u>interpreting the admissibly transformed data as scaled data in</u> processing the merged admissibly transformed data to provide merged data.

45.   (Previously Presented) A data scaling method comprising the steps of:
(a) receiving intermixed scale type data;
(b) applying admissible geometrization to the received intermixed scale type data to produce admissibly transformed data; and
(c) interpreting the admissibly transformed data as scaled data.

46.   (Previously Presented) The data scaling method of claim 45 wherein step (b) further comprises the step of:
forming two partitions of the received intermixed scale type data.

47.   (Previously Presented) A data scaling method comprising the steps of:
(a) receiving intermixed scale type data;
(b) forming two partitions of the received intermixed scale type data;
(c) applying admissible geometrization to the doubly partitioned received intermixed scale type data to produce admissibly transformed data; and
(d) interpreting the admissibly transformed data as scaled data.

48.   (Previously Presented) A data scaling method comprising the steps of:
(a) receiving intermixed scale type data;
(b) partitioning the received intermixed scale type data;
(c) forming one or more symmetric matrices from the partitioned received data;
(d) forming a second partition of the received data;
(e) associating a scale type to each subset of the second partition of the received data;
(f) applying admissible geometrization to the doubly partitioned received data to produce admissibly transformed data; and
(g) interpreting the admissibly transformed data as scaled data.

49. (Previously Presented) The data scaling method of claim 48 wherein the one or more symmetric matrices of step (c) further comprise hollow symmetric matrices.

50. (Previously Presented) The data scaling method of claim 48 wherein step (f) comprises applying 2-partition individual differences multidimensional scaling to the doubly partitioned received data.

51. (Currently Amended) A method for ~~admissibly~~ merging data comprising the steps of:
(a) receiving intermixed scale type data;
(b) applying admissible geometrization to the received intermixed scale type data to produce admissibly transformed data; and
(c) interpreting the admissibly transformed data as scaled data in processing the admissibly transformed data to provide merged data.

52. (Currently Amended) The method for ~~admissibly~~ merging data of claim 51 wherein step (b) further comprises the step of:
forming two partitions of the received intermixed scale type data.

53. (Currently Amended) A method for ~~admissibly~~ merging data comprising the steps of:
(a) receiving intermixed scale type data;
(b) forming two partitions of the received intermixed scale type data;
(c) applying admissible geometrization to the doubly partitioned received intermixed scale type data to produce admissibly transformed data; and
(d) interpreting the admissibly transformed data as scaled data in processing the admissibly transformed data to provide merged data.

54. (Currently Amended) A method for ~~admissibly~~ merging data comprising the steps of:
(a) receiving intermixed scale type data;

(b) partitioning the received intermixed scale type data;

(c) forming one or more symmetric matrices from the partitioned received data;

(d) forming a second partition of the received data;

(e) associating a scale type to each subset of the second partition of the received data;

(f) applying admissible geometrization to the doubly partitioned received data to produce admissibly transformed data; and

(g) interpreting the admissibly transformed data as scaled data in processing the admissibly transformed data to provide merged data.

55.   (Currently Amended) The method for ~~admissibly~~ merging data of claim 54 wherein the one or more symmetric matrices of step (c) further comprise hollow symmetric matrices.

56.   (Currently Amended) The method for ~~admissibly~~ merging data of claim 54 wherein step (f) comprises applying 2-partition individual differences multidimensional scaling to the doubly partitioned received data.

57.   (Currently Amended) A method for ~~admissibly~~ prioritizing preference data comprising the steps of:

(a) receiving preference data;

(b) forming two partitions of the received preference data;

(c) applying admissible geometrization to the received preference data to produce admissibly transformed data; and

(d) interpreting the admissibly transformed data as scaled data in processing the admissibly transformed data to provide priorities.

58.   (Currently Amended) The method for ~~admissibly~~ prioritizing preference data of claim 57 wherein step (b) comprises applying 2-partition individual differences multidimensional scaling to the received preference data.